

# Supreme Air Series Fume Hoods

**Operation  
& Maintenance  
Procedures**

**Recommended  
Work Practices**

**KEWAUNEE®**

*...encouraging new discovery*

# Supreme Air Series Fume Hoods

## Operating and Maintenance Procedures Recommended Work Practices

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# Operating Procedures

## Supreme Air Series Fume Hoods

*Failure to follow these procedures may result in overexposure to contaminants or other injury.*

1. Do not use Perchloric Acid in a hood not specifically designed for use with Perchloric Acid.
2. Prior to using hood, verify that the exhaust fan is operating and sufficient air is being exhausted from hood.
3. Never put head into hood while contaminants are being generated.
4. Set up all apparatus and sources of contaminants at least 6" back from sash opening and in recessed portion of worksurface.
5. Do not place electrical receptacles or other sources of ignition in hood when flammables are present.
6. Use a safety shield if there is a possibility of a small explosion or runaway reaction. This hood is not designed for explosion protection.
7. Do not obstruct slots in rear baffle.
8. Do not remove bottom deflector vane nor block off opening between the underside of the deflector vane and the work top.
9. Place equipment with large flat surfaces parallel to hood face on legs 2" to 3" high.
10. While working at hood, keep sash lowered to the minimum opening required for access to working area. During other times, keep sash closed.
11. Wear gloves and other protective clothing if skin contact with airborne contaminants is a hazard.

*Other important operating data.*

- A. Remove all materials from hood which are not needed for the immediate work.
- B. Do not store chemicals in hood.
- C. Avoid making rapid movements while working at hood.
- D. Minimize personnel traffic past hood.
- E. Avoid creating air currents in the laboratory which affect the air flow patterns into hood.
- F. Use good housekeeping in hood at all times. Clean up spills immediately.
- G. Test the performance of hood at least once every six months.
- H. In models with removable sash, always replace sash before operating.

# Additional Operating Procedures for

## Supreme Air Series Perchloric Acid Hoods

1. Use this hood only for Perchloric Acid procedures. Perchloric Acid may react with organic materials to create an explosion hazard.
2. Place large hot plates on 2" or 3" tall metal legs to allow air flow below the hot plate.
3. Operate the water wash down system for 15 minutes after each use. If the hood is used continuously during the work day, then the wash down system should be used at the end of the work day.

During the wash down procedure a small amount of water may drip into the hood work area. Prior to operating the wash down system clear the hood work area of any materials or equipment that may be damaged or contaminated by this water.

The exhaust fan should be turned off during the operation of the wash down system. The fan impeller wheel may be damaged by the water spray impacting on it at a high velocity.

The valve for the hood wash down is located on the left front vertical fascia. There may be a separate valve or switch for activating the wash down system for the duct.

4. Approximately once a week, clean the interior surfaces of the work area with water.
5. The use of other inorganic acids in the hood may adversely affect the stainless steel liner and necessitate more frequent cleaning and operation of the wash down system.

# Maintenance Instructions

## Supreme Air Series Fume Hoods

**CAUTION:** Prior to performing any maintenance work, verify with the chemical hygiene officer in charge of the laboratory that there are no hazardous contaminants on the surfaces inside the hood.

- Periodically:*
1. Check the hood for proper velocity at least annually.
  2. Clean glass panel shielding fluorescent lights from hood interior. On hoods with vapor proof or explosion proof lights, clean the exterior of the globe.
  3. Clean both sides of the sash glass.
  4. Clean work top and apply a coat of polish.
  5. Check sash cables for damage or wear. Replace if frayed.
  6. Apply a few drops of oil to the bearings on the sash pulleys.
  7. On hoods with auxiliary air chambers, replace the filter inside the chamber.

- As Needed:*
- Plumbing service fittings can be serviced by removing the hood outside end panels. Remove the plastic hole covers using a sharp tool and remove the screws holding the panel in place. If the hood is located against a wall or another hood, removable access panels are provided (except on Isotope and Perchloric Acid hoods) in the hood interior. These panels are removed by pushing up and then pulling out on the bottom of the panel.
  - To replace the fluorescent light tubes, gain access to the light fixture over the top of the hood. On auxiliary air hoods gain access through the removable panel in the rear of the auxiliary air chamber. The light fixture can be picked up from between the retaining angles and rotated to remove and replace the tubes. Four and eight foot hoods use 3' tubes and five, six, and ten foot hoods use 4' tubes.
  - For hoods with vapor proof lights, the lights are accessed from the hood interior. The globe can be unscrewed from the fixture to expose the incandescent bulb. The maximum size bulb that should be used is 150 watts.
  - For hoods with explosion-proof light, the lights are accessed from the hood interior. Remove the light panel by unscrewing the bolts at each corner. Loosen the set screw and unscrew the globe assembly from the upper portion of the fixture to gain access to the incandescent bulb. The maximum size bulb that should be used is 150 watts.

# Recommended Fume Hood Work Practices

## A Safe, Healthy Work Environment

Most people think of a scientific laboratory as a clean, safe place to work. But for the people who work there every day, the typical laboratory—filled with flammable and toxic chemicals, harmful vapors, gases and corrosive acids—can be an extremely hazardous place.

By containing harmful contaminants and venting them out of the work area, laboratory fume hoods help create and maintain a safe, healthy environment for you—the laboratory worker—and your co-workers.

Your fume hood is designed to protect you by providing an enclosed work area that has an air barrier between you and the harmful materials you

work with. Behind this protective air barrier, the hood's directional air flow carries harmful contaminants away from you toward the rear of the hood. Also, the properly tuned hood and its exhaust system dilutes the contaminants with large volumes of air and safely exhausts them.

If anything interferes with the protective air barrier or the fume hood or disrupts the proper air flow, the hood's ability to protect you and your co-workers may be seriously reduced.

Since 1906, we at Kewaunee Scientific Corporation have been designing and building laboratory fume hoods to help keep laboratory work environments safe and healthy.

Based on our knowledge and experience, we've outlined a number of basic safety practices for you and your co-workers to follow when choosing, using and maintaining laboratory fume hoods. The following practices are based on the superior design found in Kewaunee Supreme Air hoods.

We urge you to familiarize yourself with the recommended fume hood work practices on these pages and, even more important, to make a habit of applying them every day. We think you'll agree—it's the best way to help ensure a safe, healthy work area for you and your co-workers.

## The Right Fume Hood for the Job

If your laboratory fume hood is to properly protect you, it must be designed for the type of work you're doing.

For example, if you work with radioisotopes, carcinogens or other toxic materials for which decontamination is important, you should always use a hood with a non-

absorbent lining that is designed to be easily decontaminated.

If you work with large volumes of flammable substances, you may need a hood equipped with such features as a non-absorbent lining, explosion-proof lights and electrical receptacles, a fire-suppression system, and a spark-resistant exhaust fan.

If you use perchloric acid heated above ambient temperature then you need a hood and exhaust system specifically designed for this hazard.

To be sure your fume hood is the right one for the work you're doing, contact your local Kewaunee sales representative.

## Checking Fume Hood Performance

To confirm that your fume hood exhaust system is working properly, you should equip the hood with an air flow monitor. Inspect both the monitor and the system periodically for malfunctions.

For some applications a pressure gauge (e.g. No. 844 Inclined Manometer) connected to the exhaust duct is sufficient. The safe pressure range should be marked on the gauge. When using more hazardous contaminants, a fume hood alarm such as the Kewaunee Air Alert 300 or Digital Face Velocity Alarms should be used. These alarms provide both a visual and audible warning when the exhaust flow becomes unsafe.

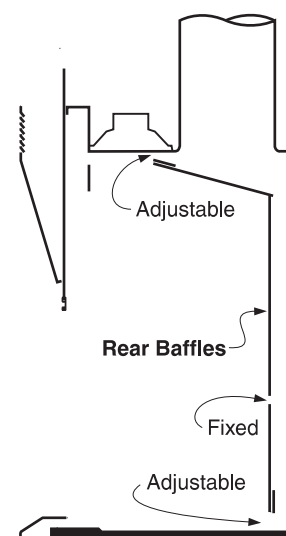
If your hood is equipped with a variable air volume controller (VAV) with alarm capabilities, then an additional alarm is not necessary.

You should have a qualified technician thoroughly test your fume hood before you use it the first time

and at least once a year after that. You should also have your hood tested after any modification to the laboratory ventilation system or other factors which may affect hood exhaust capability or room air flow patterns.

Kewaunee Supreme Air hoods are provided with one of three baffle configurations: fixed, internally adjustable, or internal single point adjustable.

On the fixed baffle configuration the size of the slots in the baffle are optimized to provide the best performance for general purpose use. On the adjustable baffle options the size of the slots in the baffle can be adjusted to provide control over the air flow patterns within the hood. In the internally adjustable baffles the size of the upper and lower slots is adjusted by moving baffle strips. In the internal remote adjustable baffle option, an adjustment knob rotates a damper behind the lower rear baffle to change the relative size of the slots.



**Figure 1.** *Rear Baffle Arrangements for Internally Adjustable Baffles*

# Recommended Work Practices (continued)

## Checking Fume Hood Performance (continued)

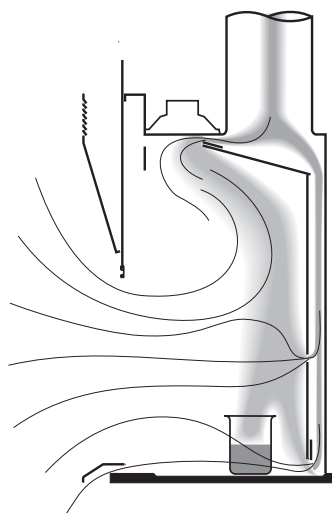
In most uses of the hood, the contaminates quickly mix with air to form mixtures which have almost the same density as air. In these cases, baffle position **A (Figure 2)** gives the best performance as it provides good flow in both the lower and upper parts of the hood work area.

When a large hot plate is used in the hood, the heat will cause the contaminates to rise within the hood. Baffle position **B (Figure 2)** allows for more air to be exhausted from the upper part of the work area and gives the best containment in this instance.

If large volumes of very dense vapors are given off in the hood they will tend

to sink within the hood. In this case, the amount of air drawn through the lower work area should be increased by using baffle position **C (Figure 2)**.

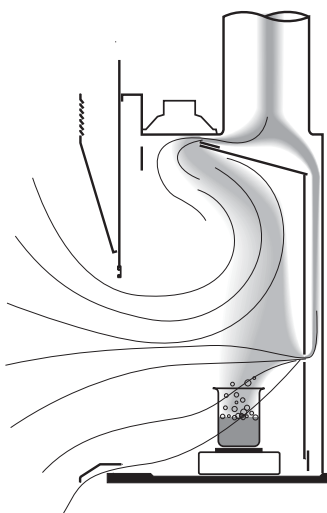
Before setting up apparatus in the hood verify that the baffle setting is correct for the procedure to be performed.



**Figure 2**

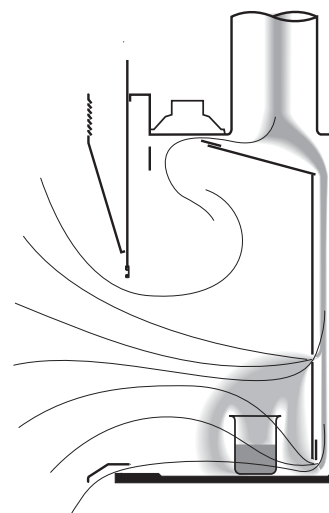
Position **A**

*Slot Adjustment for Normal Operation*



Position **B**

*Slot Adjustment for Large Hot Plates*



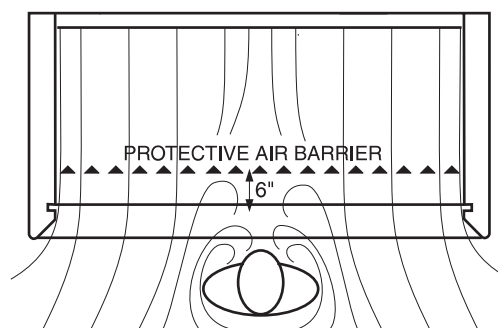
Position **C**

*Slot Adjustment for Heavy Gases and Vapors*

## Maintaining the Protective Air Barrier for a Safe Work Area

When you stand in front of a laboratory fume hood, the air passing your body to enter the hood forms a zone of low air pressure directly in front of you which extends into the hood for about four inches. Since contaminates may enter this turbulent area from inside the hood, you should keep all hazardous materials at least six inches inside the hood, behind the protective air barrier. (See **Figure 3**.)

The farther behind the fume hood protective air barrier you place the source of contaminates, the greater the protection the hood provides you. Therefore, you should place the equipment and contaminates you're using as far back inside the hood as you can, being careful not to block the lower slot in the rear baffle. (See **Figure 4**.) You should never place apparatus so far back that you have to put your head into the hood while your procedure is generating contaminates.

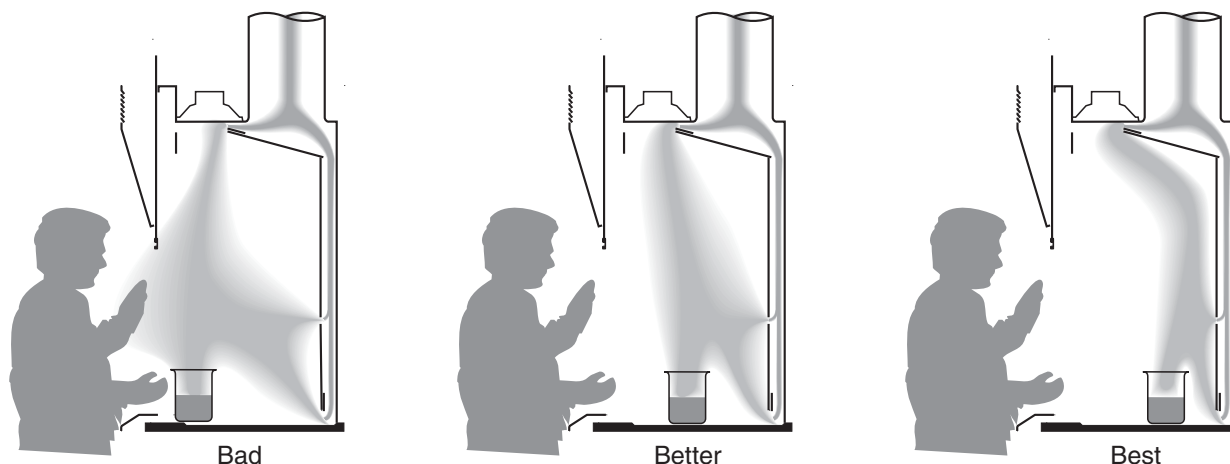


**Figure 3**

*Formation of Protective Air Barrier*

# Recommended Work Practices (continued)

## Maintaining the Protective Air Barrier for a Safe Work Area (continued)



**Figure 4**  
*Effect of placement of contaminate source*

Large containers or equipment such as furnaces, incubators and oil baths often interfere with air flow inside the fume hood by causing reverse flows and dead spots which may allow contaminants to escape from the hood. Putting large, bulky equipment you are using on legs will help reduce reverse air flows by allowing air to circulate beneath the equipment. (See Figure 5.)

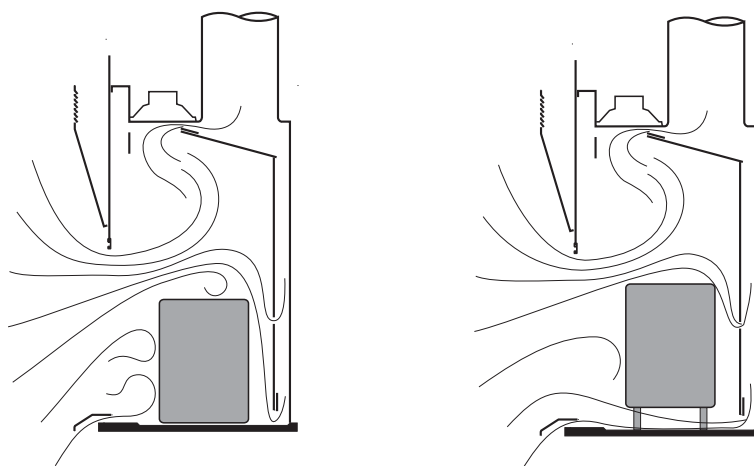
The fume hood should not be used for storage of chemicals and apparatus. You should remove all but the containers and equipment you're actually using from the hood.

The air velocities used to provide containment in fume hoods are relatively low (in the range of 100 feet per minute) and the air flow patterns are easily disrupted. You should avoid making rapid movements while working at the hood or walking past the hood.

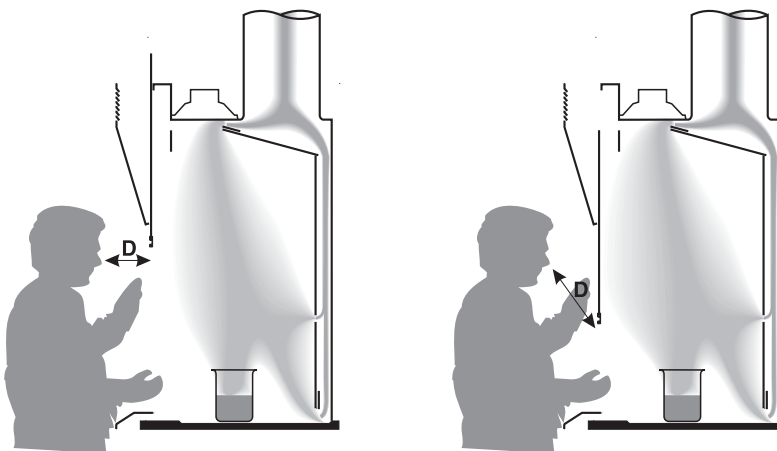
When you're working at your fume hood, you should always open the sash only as far as you need to for access to your work area.

The lowered sash increases the distance (**D** in Figure 6) between your breathing zone and the area where contaminants may escape. Also, the smaller hood face area makes the hood less susceptible to room drafts and other external air disturbances.

The sash also protects you by replacing part of the protective air barrier with a solid barrier against contaminants and splashing chemicals.



**Figure 5**  
*Effect of large equipment*



**Figure 6**  
*Effect of lowering the sash*



# Recommended Work Practices (continued)

## Maintaining the Protective Air Barrier for a Safe Work Area (continued)

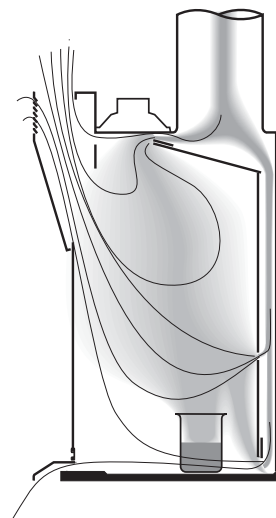
The lowered sash however, could create another problem because contaminants are present in the area behind the sash and may lead to increased corrosion of equipment in the hood. With a lowered sash, it is important for the operator to wear gloves when skin contact with airborne contaminants is objectionable.

If your hood has horizontal sashes, be sure they're all in place when you're working with contaminants inside the hood. Operating the hood with any of the sashes removed reduces the protection they provide by decreasing the velocity of the air entering the hood face. If you remove any hood sashes while setting up equipment, be sure to replace them before beginning the actual procedure.

If the hood has a sash stop with manual override to limit sash travel or is marked for a safe sash height, then the sash should not be raised above this point while contaminants are being generated within the hood.

If you don't need continuous access to the equipment inside the fume hood, you should close the sash completely. **(See Figure 7.)** The closed sash will protect you from the flying debris of a small explosion or runaway reaction. It will eliminate the effects of room drafts or other adverse air currents.

You should note, however, that keeping the sash closed can lead to increased corrosion of equipment inside the hood because any contaminants will be dispersed throughout the hood interior.



**Figure 7** *Airflow through By-Pass with Sash Closed*

### Fume Hood Safety Checklist

- ☐ The hood is the correct type for the work to be performed.
- ☐ The flow monitoring device indicates adequate air flow.
- ☐ The baffle setting is correct for the intended use.
- ☐ There are no unnecessary chemicals in the hood.
- ☐ All equipment is at least six inches behind the hood face.
- ☐ All procedures are performed with the laboratory worker's head remaining outside the hood.
- ☐ Equipment with large flat surfaces parallel to the hood face is placed on stands with legs.
- ☐ The sash is lowered to the minimum possible height.
- ☐ All safety equipment is close to the hood in case of fire or explosion.
- ☐ All laboratory workers are following the procedures outlined in this booklet, as well as any additional fume hood safety guidelines supplied by the hood manufacturer.

## For More Information

We at Kewaunee Scientific hope these guidelines will be helpful to you as you choose, use and maintain your laboratory fume hood. If you have

questions we haven't answered in this section, please contact your local Kewaunee sales representative.





P.O. Box 1842 • Statesville, NC 28687-1842  
Phone: (704) 873-7202 • Fax: (800) 932-3296  
E-mail: [marketing@kewaunee.com](mailto:marketing@kewaunee.com)  
Web Site: [www.kewaunee.com](http://www.kewaunee.com)

## Installation Instructions

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# Supreme Air **BENCH FUME HOOD** with Vertical Rising Sash

# H05

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# H08

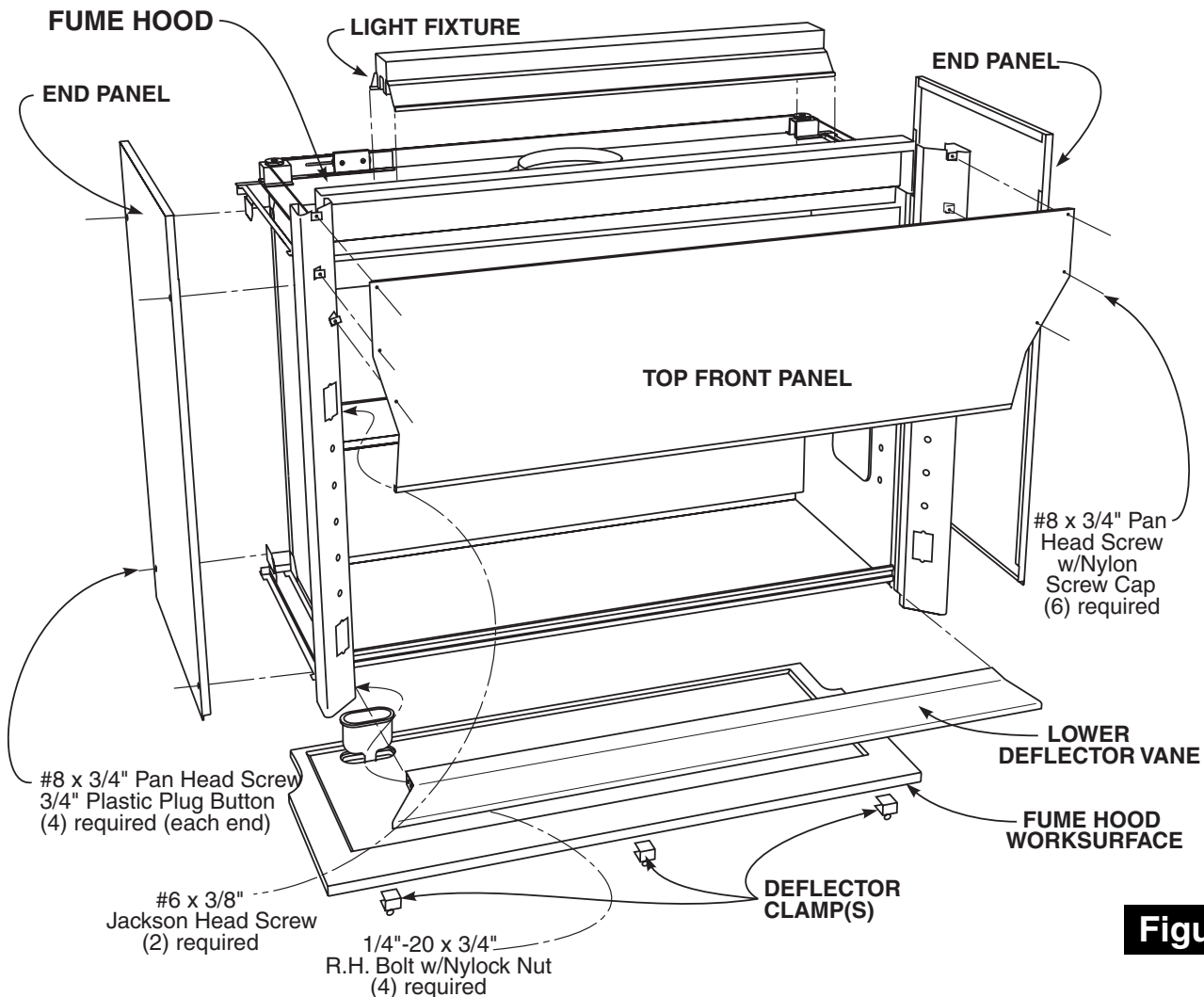
S T Y L E

## Fume Hoods

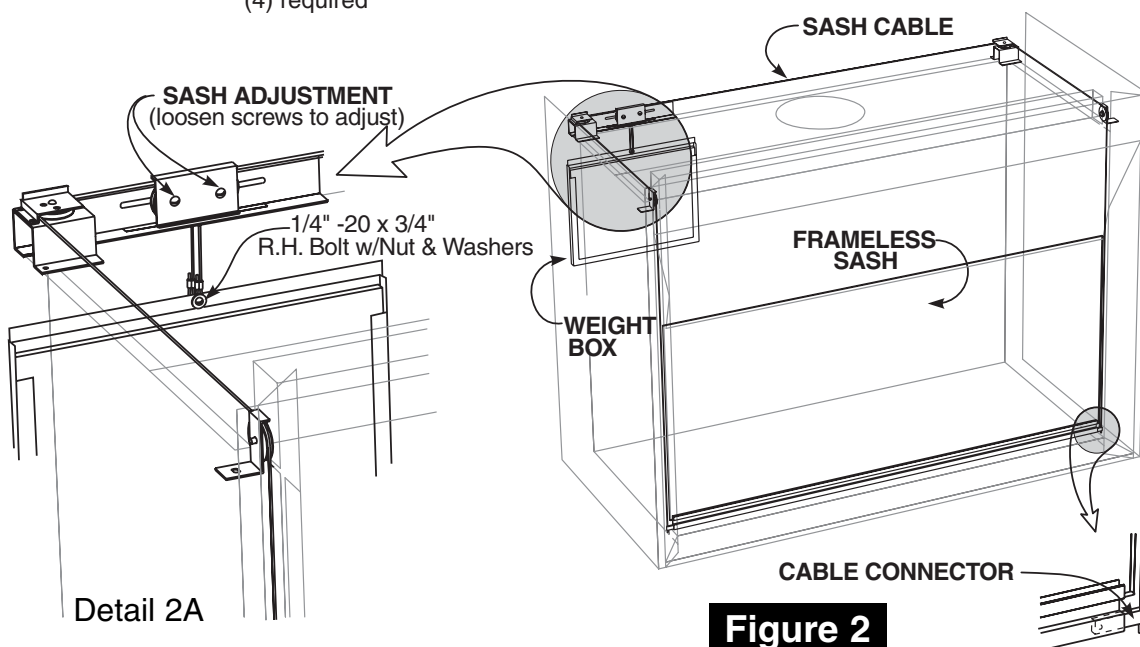
48"- 60"- 72"- 96" long

# Supreme Air Bench Hood

Fume Hood w/Vertical Rising Sash



**Figure 1**



**Figure 2**

# Supreme Air Bench Hood

## Fume Hood w/Vertical Rising Sash

### Packing List

**On Pallet** Fume Hood  
Sash Weight Box  
Hardware Package

**Hardware Package**  
(10) Nylon Screw Caps (EXTRAS)  
(10) 3/4" Plastic Plug Buttons (2 EXTRAS)  
(3) Deflector Clamps

**NOTICE** Fume Hood Worksurface is packaged separately.

### Preparation

1. Place, level, and install the **Base Unit Assembly** that will support the **Fume Hood** as shown on page 4.
2. Attach the **Fume Hood Worksurface** to the **Base Unit Assembly** at the corners using epoxy cement or similar adhesive.

**NOTICE** Worksurface should be centered on units and overhang the front by 1 1/2". Worksurface must be level. Shim beneath as needed. Top may not extend all the way to rear wall.

3. Uncrate **Fume Hood** taking care to sort and inventory all parts.
4. Remove **End Panels** from **Fume Hood** and remove screws holding **Fume Hood** and **Weight Box** to pallet. (Save End Panel screws to reattach End Panel later.)
5. Remove all packing from **Fume Hood** and any tape holding parts in place for shipping.

**NOTICE** Fume Hood is packed fully assembled except for Weight Box. The Light Fixture, Top Front Panel, and Lower Deflector Vane may be removed to fit through narrow doorways and/or for easier access.

**NOTICE** Generally electrical fixtures and plumbing fittings are shipped installed, but may be shipped loose depending on job requirements. Fittings may also be pre-wired and/or pre-piped. Fixtures are not shown on assembly diagram as quantities and locations vary to meet individual requirements.

### Installation

6. Check that **Sash Cables** are properly routed over front pulleys, around rear pulleys, and through the **Sash Adjustment** pulleys. (see Figure 2)
7. Attach **Weight Box** to cables using one (1) 1/4" -20 x 3/4" R.H. Bolt, Nylock Nut, and two (2) Flat Washers (bolt, nut, and washer shipped attached to cable ends).
8. Loosen **Sash Adjustment** pulley bolts and slide pulleys as needed to level sash. Re-tighten when adjusted.

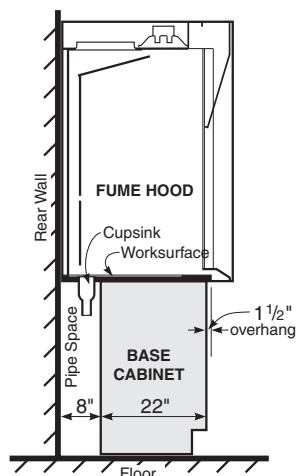
**CAUTION** Handle Frameless Sash with care - Laminated Safety Glass will crack if abused.

9. Using as many workers as needed, lift assembled **Fume Hood** and place on leveled **Worksurface**. Make sure hood is pushed back as far as possible and centered on **Base Unit Assembly**. Check **End Panels** for plumb and square.
10. Attach the spacer tabs on the bottom of the **Lower Deflector Vane** to the **Worksurface** using the **Deflector Clamps**. Check that **Lower Deflector Vane** is straight and level.
11. Coordinate connections of service fittings, electrical fixtures, and ductwork with the respective trades (i.e. mechanical, electrical, HVAC). After connections are complete, replace interior **Access Panels**, if removed, and the exterior **End Panels**. Cover screw holes in **End Panels** with 3/4" **Plastic Plug Buttons**.
12. Check **Sash** again for level and smooth movement. Adjust as needed.  
To level, loosen pulley screws on **Sash Adjustment** mechanism and slide pulleys as necessary. (see Detail 2A)  
To adjust **Sash** side-to-side, loosen screws on back of **Sash Handle** and slide the **Cable Connectors** as needed. (see Detail 2B)

**CAUTION** When adjusting side-to-side, make sure sash edges clear the front pulleys.

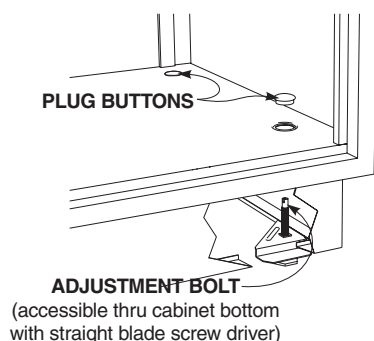
13. Inspect the complete installation, remove any dust, dirt, or other debris. Check all moving parts for proper operation, and adjust or lubricate as necessary.

# Base Unit Assembly for Bench Type Fume Hoods



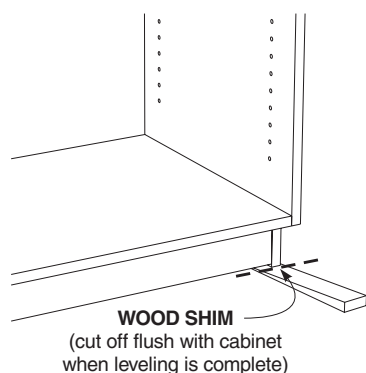
## Detail 1

*Fume Hood Base Cabinet Location*



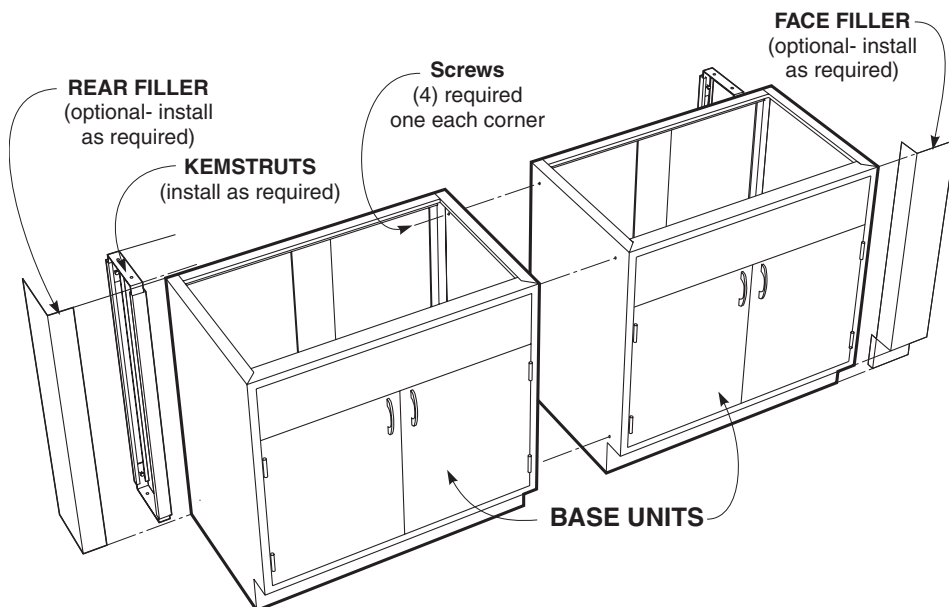
## Detail 2S

*Steel base cabinets are leveled using the adjustment bolts located in the cabinet base.*



## Detail 2W

*Wood base cabinets are leveled using wooden shims, available at any lumber yard or home center.*



## Preparation

1. Locate and mark hood and base cabinet locations making sure area is clear of obstructions and debris. Be sure all conduit, duct work and service lines have been run and are ready for final connections.

**NOTICE** Kemstruts and other pipe or worksurface supports should be installed before the base cabinets are moved into place.

2. Locate the high point of the floor within the area that the base cabinets will be installed.

## Installation

3. Starting with the base cabinet on the highest point on the floor, move the first cabinet into location as shown in Detail 1 and according to project drawings.
4. Using a four foot carpenters level, level the cabinet; side-to-side, front-to-back, and diagonally. (see Detail 2S and 2W to the left for leveling methods)

**NOTICE** Blocks or cleats may be used to fasten cabinets to floor or walls to insure cabinets don't move during installation.

5. Move the next cabinet into position and clamp it to the first cabinet, making sure that the cabinet faces and tops are flush.
6. Level the cabinet, as in step 4.
7. Using four (4) screws, as listed below, fasten the two cabinets together at all four corners of the end panels.  
Use #8 x 1-1/4" Flat Head screws for wood cabinets.  
Use #8 x 1/2" Truss Head Sheet Metal screws for steel cabinets.  
(pilot holes must be drilled in the steel cabinets before driving screws)

8. Complete hood installation and all mechanical connections before installing any required fillers or scribes.

**NOTICE** It is recommended that the polyethylene liner be removed from Acid Storage cabinets during installation to allow fastening to adjacent cabinets and ease plumbing connections. Be sure to replace when installation is complete.

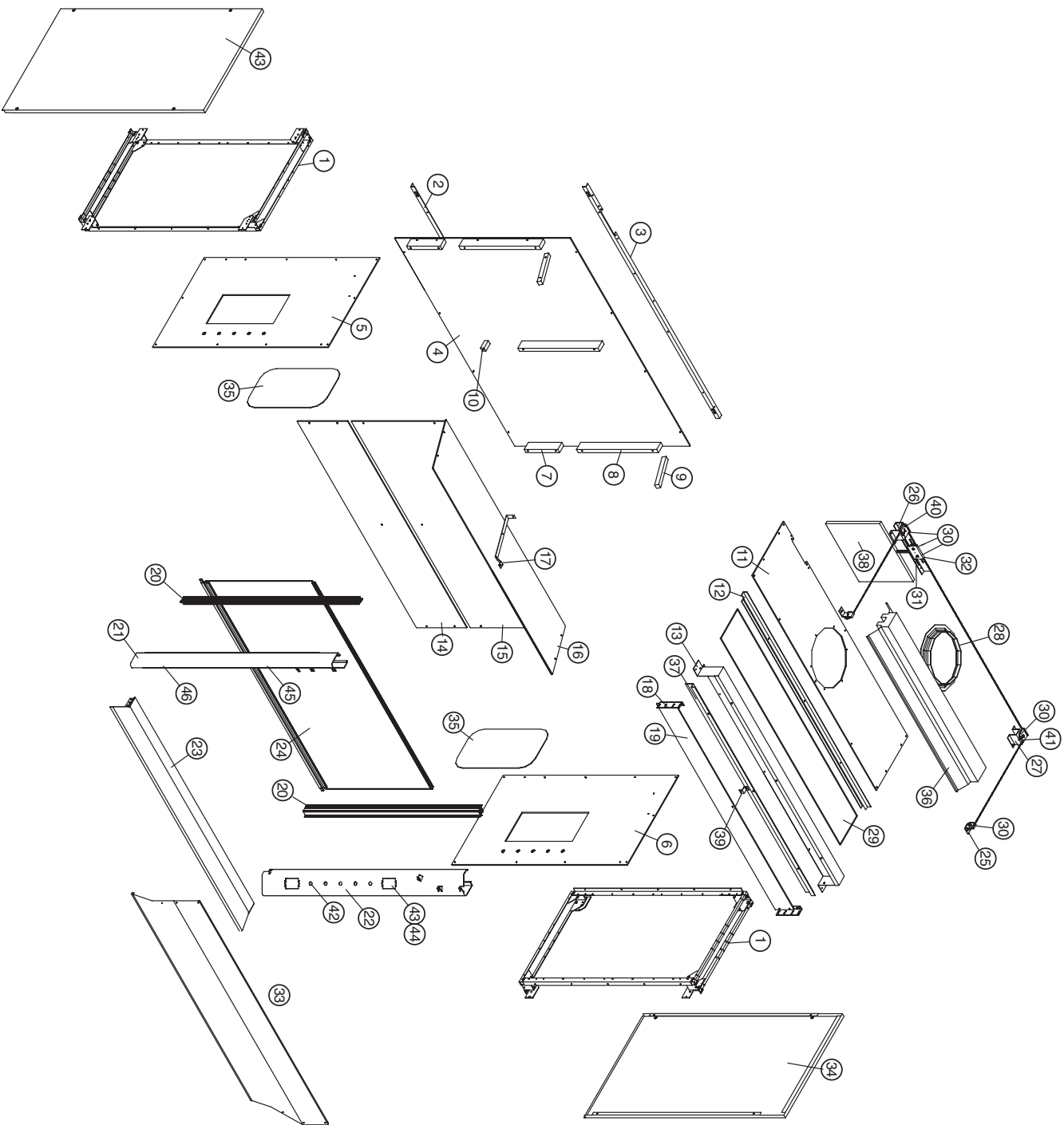
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# Supreme Air Bench Hood

Fume Hood w/Vertical Rising Sash

## NOTES:





PRT	QTY	DESCRIPTION
46	2	DUPLEX RECEPTACLE
45	1	LIGHT SWITCH
44	1	FACE PLATE MOUNTING STRAP
43	1	BLANK FACE PLATE, ST/STEEL
42	28	PLUG BUTTONS, 3/4" DIA. HOLE
41	1	RIGHT REAR CABLE RETAINER
40	1	LEFT REAR CABLE RETAINER
39	1	BYPASS BLOCK SUPPORT ANGLE
38	1	SASH WEIGHT ASSEMBLY
37	1	FUME RETAINER
36	1	LIGHT
35	2	ACCESS PANEL
34	2	END PANEL
33	1	FRONT PANEL ASSEMBLY
32	1	SASH ADJUSTMENT PLATE
31	1	SASH ADJUSTMENT BRACKET
30	8	2" DIA. PULLEY
29	1	LIGHT GLASS
28	1	DUCT COLLAR
27	1	RIGHT REAR PULLEY BRACKET
26	1	LEFT REAR PULLEY BRACKET
25	2	FRONT PULLEY BRACKET
24	1	SASH ASSEMBLY
23	1	DEFLECTOR VANE WELDMENT
22	1	RIGHT FACIA
21	1	LEFT FACIA
20	2	SASH TRACK ASSEMBLY
19	1	BYPASS BLOCK OFF PANEL
18	2	BYPASS BLOCK PANEL ANGLE
17	1	SLOPING BAFFLE STRAP
16	1	SLOPING BAFFLE
15	1	UPPER BAFFLE
14	1	LOWER BAFFLE
13	1	BYPASS PANEL
12	1	LIGHT ANGLE
11	1	TOP LINER PANEL
10	1	LOWER CENTER CLEAT
9	2	SLOPING CLEAT
8	3	UPPER CLEAT
7	2	LOWER SIDE CLEAT
6	1	RIGHT SIDE LINER PANEL
5	1	LEFT SIDE LINER PANEL
4	1	BACK LINER PANEL
3	1	TOP BACK LINER ANGLE
2	1	BOTTOM BACK LINER ANGLE
1	2	END FRAME WELDMENT

## HO5 Fume Hood - Parts Listing

# Supreme Air Fume Hood

# H05

Bench Hood with Vertical Rising Sash

(indicate fittings/fixtures required)

(indicate fittings/fixtures required)

**Light Switch**

Plugged

Plugged [Air]

Plugged [Gas]

Plugged [Cold Water]

Plugged [Vacuum] [Option F]

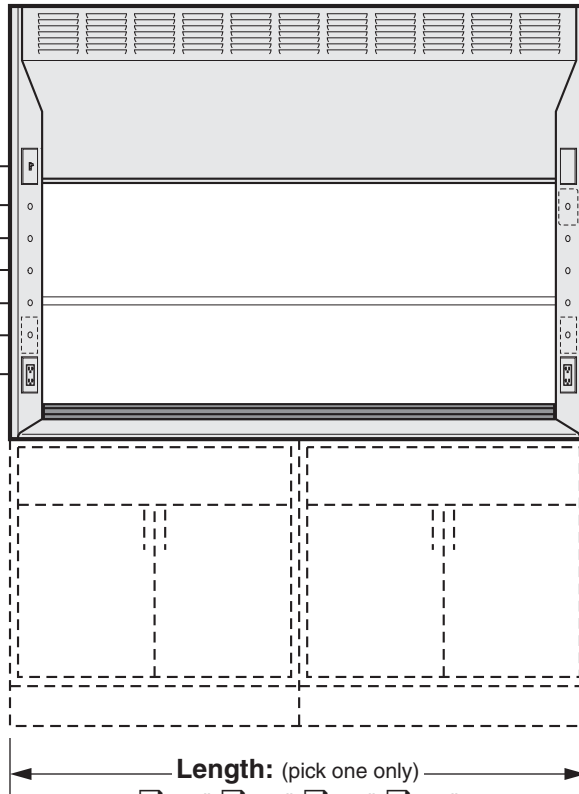
120VAC GFI Duplex

**Liner Option:** (pick one only)

- ☐ **K** KMER
- ☐ **G** Kemglass
- ☐ **S** Type 304 St. Steel
- ☐ **T** Phenolic Resin

**Pre-piping:** (pick one if required)

- ☐ Pre-pipe Up
- ☐ Pre-pipe Down



[Alarm Location 2] **Blank Face Plate**

[Alarm Location 1] Plugged

[Air] Plugged

[Gas] Plugged

[Cold Water] Plugged

[Option F] [Vacuum] Plugged

120VAC GFI Duplex

**By-Pass Option:** (pick one only)

- ☐ **-** Open By-Pass
- ☐ **B** Restricted By-Pass  
(restricted to 20%  
of face opening)  
(front panel louvers omitted)

**Length:** (pick one only)

- ☐ 48" ☐ 60" ☐ 72" ☐ 96"

**Add On Options:** (indicate options required)

**Interior Baffle Arrangement Options:** (pick one only)

- Standard Fixed Baffle
- ☐ **A** Adjustable Baffle
- ☐ **C** Single-Point Adjustable Baffles

**Distillation Rack Option:** (pick if required)

- ☐ **D** Distillation Rack

**Fire Extinguisher Option:** (pick if required)

- ☐ **E** Fire Extinguisher

**Electric and Plumbing Options:** (pick all required)

- ☐ **F** Two Additional G.F.I. Receptacles 120VAC
- ☐ **G** Front Load Fittings
- ☐ **H** Pre-Wired to Top of Hood – UL Listed

**Safety Shield Option:** (pick if required)

- ☐ **I** Safety Shield

**Interior Lighting Options:** (pick one only)

- Standard Fluorescent Light (T-5 Ballast)
- ☐ **J** Fluorescent Light (T-8 Ballast)
- ☐ **K** Vapor Proof Light (Incandescent)
- ☐ **L** Explosion Proof Light (Incandescent)

**Lower Deflector Vane Options:** (pick one only)

- Standard Painted Lower Deflector Vane
- ☐ **O** Stainless Steel Deflector Vane

**Sash Handle Options:** (pick one only)

- Standard Painted Metal Sash Handle
- ☐ **Q** Stainless Steel Sash Handle

**Top Front Panel Options:** (pick all required)

- ☐ **T** Chevron Grille (Open By-Pass Only)
- ☐ **V** Vision Panel

**Fume Hood Alarm Options:** (pick one if required)

- ☐ **W** Air Alert 300 Alarm (location 1)
- ☐ **Z** Air Alert 300 Alarm (location 2)
- ☐ **M** Air Alert 600 Alarm (location 1)

**Sash Frame and Glass Options:** (pick one only)

- Standard Frameless Laminated Safety Glass Sash
- ☐ **1** Frameless Tempered Glass Sash
- ☐ **2** Framed Laminated Safety Glass Sash
- ☐ **3** Framed Tempered Glass Sash
- ☐ **4** Stainless Steel Safety Glass Sash
- ☐ **5** Stainless Steel Tempered Glass Sash

**Miscellaneous Options:** (pick all required)

- ☐ **6** Tissue Screen
- ☐ **7** Stainless Steel Duct Collar
- ☐ **8** Gravity Sash Stop @ 17" above deflector vane

<b>LINER</b> <b>LENGTH</b> <b>BY-PASS</b> <b>ADD-ON OPTIONS</b>				<b>COLOR</b>		<b>ITEM NO.</b>	
<b>H05</b> <input type="checkbox"/> <b>54</b> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <b>00</b>							
<b>PROJECT NAME:</b>						<b>QUANTITY</b>	

# Supreme Air Fume Hood

Bench Hood with Vertical Rising Sash

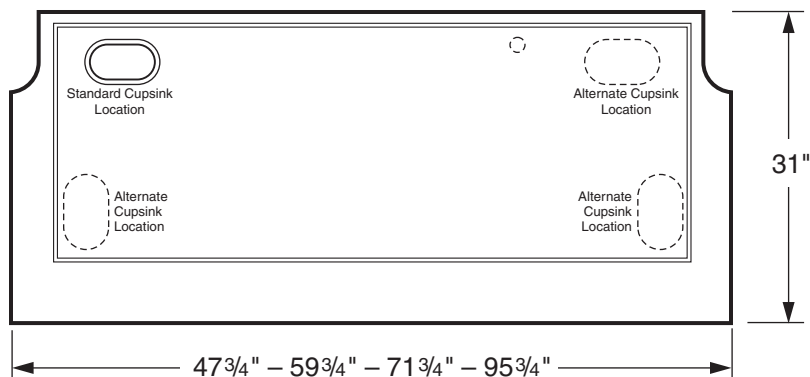
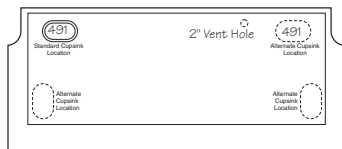
# H05

## Plan of Work Top

Indicate cutouts required by noting cupsink part number or size and/or hole type and size at desired location:

### Example:

The example below calls for two 491 cupsink cutouts in the rear along with a 2" dia. vent hole.



For sink or steambath cutout:  
Sketch in size and location required.

If no cutout is marked, work top will ship with 3"x6" cupsink cutout in left rear corner. If no cutout is required, cross out standard cupsink location. (Cupsink is

### Work Top Material

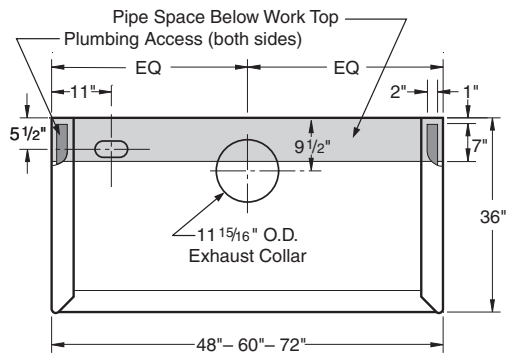
- ☐ Black Kemresin  
☐ Type 304 Stainless Steel ☐ Type 316 Stainless Steel

Overall Hood Length	Sash Opening			Total CFM and Static Pressure					
	Width	Height	Total Ft. <sup>2</sup> *	80 FPM	S.P.	100 FPM	S.P.	120 FPM	S.P.
4'-0" / 48"	40"	28"	8.1	650	0.15"	810	0.25"	980	0.35"
5'-0" / 60"	52"	28"	10.5	840	0.20"	1050	0.30"	1260	0.45"
6'-0" / 72"	64"	28"	12.9	1040	0.25"	1290	0.40"	1550	0.60"
8'-0" / 96"	88"	28"	17.7	1420	0.15"	1770	0.25"	2130	0.35"

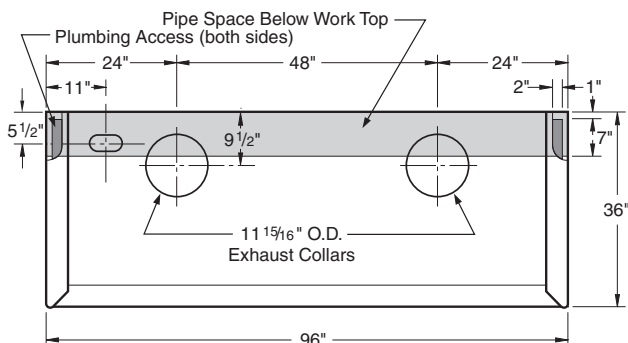
\* Includes 1" opening below deflector vane.

- CFM requirements shown above are for **Open By-Pass** hoods. The CFM requirements for a **Restricted By-Pass** hood with the sash fully open is the same as above. The by-pass opening with the sash closed is 20% of that with the sash fully open.
- Static pressures shown are for the pressure drop through the hoods only. The total pressure drop through the hood and the duct system must be calculated to select the proper exhaust fan.

### Rough-In for 4' - 5' - 6' Hoods



### Rough-In for 8' Hoods



### Vertical Section

